



12th Annual Northern Plains Weather Workshop

April 8-9, 2008

Best Western- Ramkota Hotel

Bismarck, North Dakota

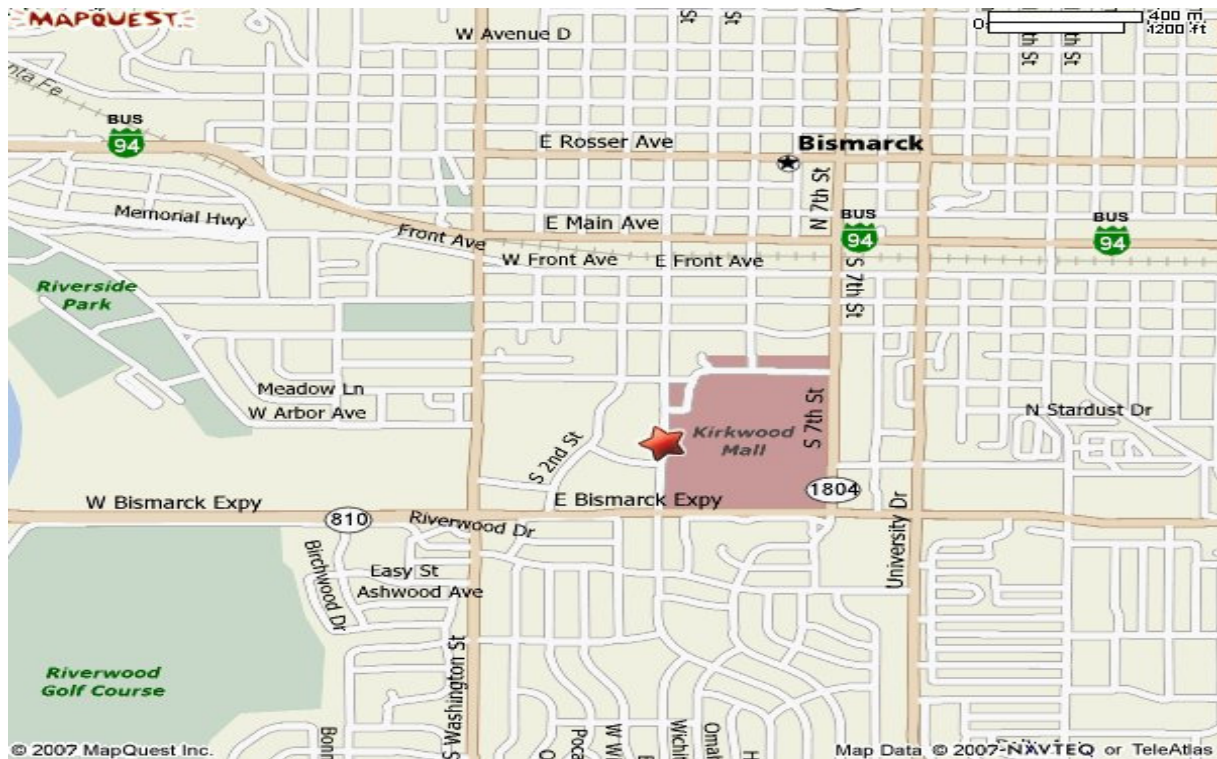
The National Weather Service office in Bismarck, ND would like to extend a warm greeting to our city in attending our 12th Annual Northern Plains Weather Workshop. While in April, our weather may not always be too warm, but we have warm hearts. We hope you enjoy your stay in our city and the workshop.

The following pages will contain Hotel information, an area map with directions into Bismarck, plus a listing of restaurants and shopping within the city. And an **agenda of talks.**

Remember to make your hotel reservations by **March 7th. The hotel number is **(701) 258-7700**. A block of 20 rooms is reserved for the workshop and many rooms are still available. The single rooms go for **\$ 55** and **\$ 75** for double rooms. More rooms can be added at this rate if needed. The workshop is under the name **NWS**.**

A banquet lunch will be served on **Tuesday, April 8th, in our meeting room for those wishing to participate. Details on the choice of food will come about the middle of March.**

Area Map of Bismarck and Hotel



Best Western: 701-258-7700

800 S 3rd St

Bismarck ND

58504 US

Best Western / Ramkota Hotel Directions into Bismarck

Coming from Montana:

On I-94, take Exit 157 and get onto Divide Avenue eastbound. Go east to 3rd Street and turn right at the light onto 3rd. Go about 3 miles and hotel is on your right, across from the Kirkwood Mall.

Coming from Eastern ND and Minnesota:

On I-94, exit at 161 (Bismarck Expressway), and turn left at the light. Follow this southbound and around to the west to 3rd Street. Turn right at 3rd and go about 2 blocks. Hotel will be on your left with the Kirkwood Mall to your right.

Coming from Aberdeen:

Take Highway 281 to Jamestown and go westbound on I -94. Upon reaching Bismarck, exit at 161 (Bismarck Expressway). At light, turn left and follow this road southbound and around to the west until reaching 3rd Street. At light, turn right and go about 2 blocks. Hotel will be on your left with the Kirkwood Mall on your right, across the street.

Coming from Rapid City:

Take I-90 westbound to Highway 85 (north) into North Dakota. Follow Highway 85 to Belfield and go eastbound on I-94. Finally exit at 157 and get on Divide Avenue. Go east on Divide to 3rd Street and turn right at the light. On 3rd Street, go about 3 miles and hotel is on your right with the Kirkwood Mall to your left.

Coming from Sioux Falls:

Take I-29 north to Fargo and go westbound on I-94 to Bismarck. Exit at 161 onto Bismarck Expressway. At light, turn left and follow road southbound and around to the west to 3rd Street. At the light, turn right and go about 2 blocks. Hotel will be on your left with the Kirkwood Mall to your right, across the street.

List of Restaurants, Shopping, Etc.

Kirkwood Mall (Across from Hotel) –

- * Fortune Cookie (Oriental)
- * Grizzley's Bar and Grill
- * Star Buck's Coffee
- * Arby's
- * Subway

3rd Street - (Street Next To Hotel)

Applebee's

Ground Round

Los Amigo's (Mexican)

A & W

Buffalo Wings

Borrowed Bucks Roadhouse Tavern

Burger King

Qdoba (Mexican)

Taco John's (Mexican)

Walrus Bar and Grill

Star Buck's Coffee

Bismarck Expressway – (1 block south of Hotel)

Famous Dave's BBQ

DiDonna's (Italian)

TGI Friday's

Perkin's

McDonald's

Wendy's (East of Hotel on Expwy – ½ mile)

Walmart / Sam's Club/ Arby's /Taco Bell (East of Hotel on Expwy– 4 miles)

Dan's Supermarket (West of hotel by 3 blocks)

Captain Jack's Liquors (West of hotel by 2 blocks)

North End of Bismarck – (North on Boulevard to 83rd)

Red Lobster

Space Aliens (Family Restaurant)

Ruby Tuesday's

Applebee's

Golden Corral (American Buffet)

China Star (Buffet)

Perkin's

McDonald's

Arby's

Burger King

Gateway Mall – Asian Buffet / Rock 'n Roll Cafe

Guest Speakers and Presentations for the Workshop

(Updated 3/13/08)

Guest Speakers:

Dr. Bob Weisman, Professor at Saint Cloud State University, Saint Cloud, Minnesota

Cap on a Hot, Thin PBL: Inversions and Convective Initiation in the Northern Plains

Dry Humor: Precipitation Anomalies During Saint Cloud “Droughts”

Mr. Charlie Russell, Emergency Manager for Dickey County in North Dakota

Relationship of the Emergency Manager with the NWS

12th Annual Northern Plains Weather Workshop Agenda

April 8-9, 2008

Best Western – Ramkota Hotel

Bismarck, North Dakota

April 8th

8:00 am.....Opening Remarks & Welcome

Session: Severe Storms & Flash Flooding (Part I)

8:10 am.....Numerical Simulations of Supercells: Determining Environments Favorable for Tornadoogenesis

(**Jason Naylor**, Student, University of North Dakota, Grand Forks, North Dakota)

8:35 am.....Use of New Software in an Evaluation of the 14May 2007 Upper Michigan Severe Thunderstorm Event

(**Marcia Cronce** and **Michael Dutter**, NWS, WFO Marquette, MI)

9:00 am.....Rainfall Totals from the Hermosa Flash Flood of August 17, 2007

(**Meagan Holm** and **Melissa Smith**, NWS, WFO Rapid City, South Dakota)

9:25 am.....Break (Refreshments in Back)

9:40 am.....Guest Speaker (**Dr. Bob Weisman**, Professor of Meteorology, Saint Cloud State University, Saint Cloud, Minnesota)

Additional Authors: (**Jared Wieseler**, DTN Meteorologix, Burnsville, MN, and **Jon Abel**, SCSU)

Cap on a Hot, Thin PBL: Inversions and Convective Initiation in the Northern Plains

10:25 am..... An Evaluation of the Near Storm Environmental Conditions during the 29 March 1998 Southern Minnesota Tornado Event

(**Tom Hultquist**, NWS, WFO Twin Cities/Chanhassen, Minnesota)

10:50 am..... An Examination of the 29 March 1998 and 24 August 2006 Southern Minnesota Tornadoes from a Warning Preparedness Aspect

(Karen Trammell, NWS, WFO Twin Cities/Chanhassen, Minnesota)

11:15 am.....Meteorological and Societal factors of the 18-20 August 2007 Historical Flooding Event in Southern Minnesota and SW Wisconsin

(Lisa Schmit, NWS, WFO Twin Cities/Chanhassen, Minnesota)

Session: Winter Weather

11:40 am.....Winter Weather Challenges and Opportunities

(Mark Askelson, Professor, Department of Atmospheric Sciences, University of North Dakota, Grand Forks, North Dakota)

12:05 am.....Lunch (Served in Meeting Room) (Optional)

Session: Radar Meteorology

1:05 pm.....Thunderstorm Identification Tracking Analysis and Nowcasting: Software Applications for North Dakota Cloud Modification Project WSR-74C Radar Data

(Mark Schneider, North Dakota Atmospheric Resource Board, Bismarck, North Dakota)

1:30 pm.....A Brief Summary of NOAA Hazardous Weather Testbed Activities in 2007

(Dan Miller, NWS, WFO Duluth, Minnesota)

Session: Forecasting

1:55 pm.....Forecasting Hail Size over Western South Dakota and NE Wyoming

(Jeffrey Schild, and Lee Czepyha, NWS, WFO Rapid City, South Dakota)

2:20 pm.....Sounding Analysis and Research Tools: What is used in Rapid City?

(Matt Bunkers, NWS, WFO Rapid City, South Dakota)

2:45 pm.....Break (Refreshments in Back)

3:00 pm.....Forecasting Summertime Convection in Western North Dakota Using
RAOB

(**Dan Brothers**, North Dakota Atmospheric Resource Board, Bismarck,
North Dakota)

3:25 pm.....Dry Slot Convection – A Method of Predicting Convective Initiation
for the Most Significant Severe Weather

(**Andrew Just**, NWS, WFO Marquette, Michigan)

3:50 pm.....Virtual vs Non-Virtual MLCINH Observed in Summertime Null
Convective Events in the Northern Plains

(**Andy Fischer**, NWS, Aviation Weather Center, Kansas City, MO)

4:15 pm.....Quick Break (Refreshments in Back)

Session: Digital Services & Outreach (Part I)

4:20 pm.....Guest Speaker: The Relationship of the Emergency Manager and NWS

(**Mr. Charlie Russell**, Emergency Manager of Dickey County, North
Dakota)

4:45 pm.....A Digital Services Round Table Discussion

(For NWS Offices, but All Invited – Hosted by **Todd Hamilton**, WFO
Bismarck)

5:30 pm.....Adjourn

***** All are welcome to sample our restaurants and continue the workshop discussion*****

Session : Posters (Outside of Meeting Room)

Record Summer Heat in Bismarck CWA for 2006 (**Vic Jensen and Nathan Heinert** , NWS, WFO
Bismarck, North Dakota)

North Dakota Historical Tornado Track Map , (**Nathan Heinert**, NWS, WFO Bismarck, North
Dakota)

April 9th

Session: Digital Services & Outreach (Part II)

8:00 am.....NorLatMet: A Partnership between MSC, NWS and COMET

(James Cummine, Phil Chadwick and Jayme Gadal, Prairie and Arctic Storm Prediction Center, Winnipeg, Manitoba, Canada)

Session: Climate

8:25 am.....The Interannual Variability of Northern Plains Temperatures As Related to the ENSO and the PDO

(Kevin Birk, NWS, WFO Bismarck, North Dakota)

Session: Severe Storms & Flash Flooding (Part II)

8:50 am.....Guest Speaker (Dr. Bob Weisman, Professor of Meteorology, Saint Cloud State University, Saint Cloud, Minnesota)

Additional Authors (Kathleen Rogers, SCSU Scientific Discovery Program)

Dry Humor: Precipitation Anomalies During Saint Cloud “Droughts”

9:20 am.....Break (Refreshments in Back)

9:35 am.....Impact of Evapotranspiration on Deep Convection on the Prairies

(James Cummine, Prairie and Arctic Storm Prediction Center, Manitoba, Canada)

10:00 am.....An Overview of the Historic NE South Dakota Flash Flood of May 5-6, 2007

(Michael Fowle and Scott Doering, NWS, WFO Aberdeen, SD)

10:25 am.....The Brown County Flood - Weather Support in the Emergency Operations Center

(Jim Scarlett and Jennifer Zeltwanger, NWS, WFO Aberdeen, SD)

10:50 am.....Evaluation of Standardized Anomalies and Other NCEP/
Hydrometeorological Prediction Center Tools for an Extreme
Flood Event in Minnesota and Wisconsin

(Joshua Scheck, NWS, WFO Bismarck, North Dakota)

11:15 am.....A Historical Analysis of an Apparently Undocumented 1887
Northern Plains Tornado Event

(Vince Godon, Kelly Kramlich, and Nancy Godon, NWS, WFO
Grand Forks, North Dakota)

11:40 am.....Break (Refreshments & Snack Items in Back)

11:55 am.....A Preliminary Quantitative Analysis of the Frequency of Low Level
Thermal Gradients in the Central United States during the Warm
Season

(Kevin Donofrio, Thomas Lonka, Michael Bettwy, and Dan Miller,
NWS, WFO Duluth, MN)

12:20 pm.....Frontogenesis Forcing and It's Relation to Convective Initiation and
Convective Initiation Failure in the Warm Season

(Dan Miller, NWS, WFO Duluth, and Phil Schumacher, NWS, WFO
Sioux Falls, South Dakota)

12:45 pm.....An Overview of the Northwood, North Dakota EF4 Tornado
(26 August 2007)

(Dave Kellenbenz and James Kaiser, NWS, WFO Grand Forks, ND
and Chauncy Schultz, NWS, WFO Bismarck, North Dakota)

1:10 pm.....Post-Event Reaction to the Northwood, North Dakota EF4 Tornado
of 26 August 2007: Storm Survey and Public Response

(Dave Kellenbenz, Geoff Grochocinski, and Brad Bramer, NWS,
WFO Grand Forks, North Dakota)

1:35 pm.....End of Workshop

**** Thanks to all of the Presenters and Attendees – Have a Safe Trip Home****